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A Defense of Animal Moral Cognition

by

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Senior Honors Project

Spring, 2013

Humans have long considered themselves unique in the animal kingdom. However, assumptions about human uniqueness have come increasingly under attack with discoveries in comparative psychology and animal behavior. Humans are not the only ones to socialize, communicate and use tools. Many scientists and philosophers are even now willing to attribute consciousness to non-human animals (henceforth, “animals”). Additional evidence about animals exhibiting empathic, altruistic, cooperative and fair behavior has also been observed. Such behavior is interesting by itself, but it also leads to questions about why the animals are acting in these particular ways. Mark Bekoff, Frans De Waal and Mark Rowlands have examined this issue and have proposed different theories to explain this behavior; including thinking of some of these animals as being moral to a degree. However, if philosophers agree on one thing it is that animals do not possess genuine moral cognition. Moral cognition is one of the last bastions of human uniqueness. Toppling that belief would have tremendous consequences. Societal treatment of animals is largely predicated on the perceived superiority of humans. If animals are shown to be moral, some of the justifications for human treatment of animals would be challenged.

In this paper I present the historical context in which this debate of animal moral cognition takes place. I then explore the current evidence in support animal morality. I examine the current theories about animal moral cognition, present my own and then evaluate potential objections to my thesis. The thesis I will defend is that some animals are morally cognitive creatures, meaning animals are capable of empathizing with other animals and then having those emotions provide motivation (reasons) to act in altruistic ways. Additionally, I situate their morality in a system of cooperation. Animals are cooperative creatures that maintain cooperation that closely resembles a human moral system with norms governing behavior, including

punishments for disobeying those norms. I do not anticipate my thesis being particularly popular; however, with the available evidence, I argue that this is an accurate assessment of some animal behavior. Before my analysis begins it is important to understand the historical context in which this debate takes place.

2. Historical Account of Animal Moral Cognition

This thesis begins by discussing different views philosophers and society have held on the possibility of moral cognition in animals. Peterson (2012) shows that over the course of history there have been times at which animals have been tried and executed for their alleged violence and sex with humans. This was a common practice in the medieval period. Society thought animals were capable of malice and vengeance. Even as recently as the 20th century, several high profile elephant executions occurred in the United States. There were a couple of recurring themes in the elephant executions worth noting. All of them were conducted as a response against elephants that were thought to have attacked humans out of vengeance. Their executions were made public; some of the elephants were even executed on a stage in front of people who purchased tickets to witness the event. Lastly, these executions, took place with a sense a justice. The view was that animals had the cognitive powers to understand their actions and were responsible for their actions and so could be punished for them (Peterson, 2012 p. 10-11).

Philosophically, there has been a great debate about the issue of animals having minds at all. The view that animals possess a mental capacity has been challenged for centuries. Descartes (1637/1960) argued in *Discourse on the Method* that animals were merely complex machines. Preprogrammed instinct, not cognition, drove their behavior. When the environment is changed, the machine's response may change, but it is still a machine. The Cartesian view held that

animals did not have minds and therefore were not capable of moral reasoning or understanding. He argued that this was evident because animals, unlike humans, did not possess language. Language is crucial because it shows that an actor can adapt to new situations in a creative fashion, giving credence to the idea that the actor is not simply responding to the environment in a mechanical way. Descartes believed that a lot of human action did not need the process of the mind, but animals did not possess this capacity at all (Descartes, 1637/1960, p. 21-5). Even though they possessed the necessary physiology and time to develop language, they never did. Descartes believed that the reason they did not do this was because they lacked thought. Thus animals were complex machines incapable of thoughts, emotion, suffering or other mental states and by implication, no capacity for moral cognition. This view has been prominent amongst philosophers and scientists for centuries.

Hume (1739/1978) in *A Treatise of Human Nature* contrasted with Descartes. Descartes believed that animals lacked a mind, while Hume thought they possessed minds. “No truth appears to be more evident, than that beasts are endow’d with thought and reason as well as men” (Hume, 1739/1978, p. 176). Since humans and animals behave in very similar ways, Hume thought that the same underlying process of the mind was the same.

Hume thought that what was good is characterized by its virtue. There are two types of virtues, natural and artificial. Natural virtues are things like friendliness, perseverance, courage, love and care. Hume believed that animals do possess these qualities. However, those virtues did not constitute genuine morality for Hume. He believed that morality was still a uniquely human quality because morality required the artificial virtues. Artificial virtues are things like justice and property and they are only possible to achieve with the act of reflection. According to Hume, only humans have the ability to reflect:

I must here observe, that when I deny justice to be a natural virtue, I make use of the word, *natural*, only as oppos'd to *artificial*. In another sense of the word ; as no principle of the human mind is more natural than a sense of virtue ; so no virtue is more natural than justice. Mankind is an inventive species ; and where an invention is obvious and absolutely, it may as properly be said to be natural as any thing that proceeds from original principles, without the invention of thought or reflexion (Hume, 1739/1978, p. 484).

Hume believed that reflection allows concepts like justice and respect of property to flourish and systems of morality to develop. These concepts are inventions from society and are founded on social rules that have been approved by society. Hume believed that humans were the sole possessor of reflection, artificial virtues and full-fledged morality.

Hume also believed that reason had no bearing on morality;

The merit and demerit of actions frequently contradict, and sometimes control our natural propensities. But reason has no such influence. Moral distinctions, therefore, are not the offspring source of reason. Reason is wholly inactive, and can never be the source of so active a principle as conscience, or a sense of morals (Hume, 1739/1978, p. 458).

Passion, emotional sentiments, how things make people feel is what generates the moral distinctions and motivation for action.

Kant (1785/2002) in *Groundwork of the Metaphysics of Morals* contrasted with Hume's idea about morality being generated by emotional sentiments. Kant posited that the categorical imperative is what determines the moral law (Kant, 1785/2012, p. 203). The categorical imperative is a test that asks if the action to be performed can simultaneously be willed to be a universal law. If that action can be performed without breaking the categorical imperative, then

that action is permissible. If an action violates the categorical imperative, it is immoral. The categorical imperative generates moral duties that people are obligated and therefore motivated to follow.

Kant believed that moral motivations could be found out of respecting the duty to abide by the moral laws. The way that people personally feel does not play a role in making an action moral. Consequences are not the deciding factor as Kant (1781/2003) argued in *Critique of Pure Reason*:

Actions of others that are done with great sacrifice for the sake of duty alone may indeed be praised by calling them *noble* and *sublime* deeds, but only insofar as there are traces suggesting that they were done wholly from respect for duty and not from ebullitions of feeling (Kant, 1781/2003, p. 72-3).

The decision to act in a certain way to avoid punishment or because it makes a person feel good does not constitute morality for Kant.

Kant (1785/2002) believed that it was reason that made humans able to postulate these imperatives, form the moral law and abide by the law. Central to his idea is autonomy. Actors must have the ability to subject limitations upon their actions if they are to be considered moral. This also required a degree of reflection. Actors have to ask themselves not only if they can act in a certain way but if that they should. Kant believed that in order to be a moral agent one must be able to give themselves to the law and then constrain themselves from acting against the law. It takes reason to criticize against one's own actions, go against mere impulses and project and follow the moral law. The problem for animals is that they lack reason and therefore they cannot be moral.

Darwin in the *Descent of Man* (1871) helped bring a movement back to a Humean perspective of animals. Darwin gave reasons in his theory of evolution that supported Hume's arguments that animals possess a rudimentary form of morality. Evolution takes a very long time. The human mind is very complex. Very complex things take a long time to develop. Humans are not that old and therefore it is likely that the cognitive faculties predate humans. Therefore versions of these faculties of a mind should be widely distributed throughout the animal kingdom. The second way that Darwin thought that other animals could have acquired some cognitive faculties is through natural selection. Cognitive capacities help animals adapt and reason through new situations. It is likely that the species that had these faculties would be the species surviving and prolonging their genes.

Darwin, like Hume, thought that animals possessed emotional sentiments like love, sympathy, compassion and empathy; however, animals are not genuinely moral because these are only precursors to morality. Darwin thought that morality required a moral sense. The moral sense is a consciousness, a cognitive faculty that helps animals make decisions to help create solidarity within their communities. The moral sense is used to help compare past and future activities in order to make better future decisions about how to act. "Man, from the activity of his mental faculties, cannot avoid reflection ; past reflections and images are incessantly passing through his mind with distinctness" (Darwin, 1871, p. 86). This is the reflective nature of morality that Darwin, like Hume believed was exclusive to humans. This reflective capacity is the ability to think beyond immediate emotions and place greater restrictions on action.

Darwin's views were not accepted uncritically by scientists and philosophers. There was skepticism about the way Darwin presented the evidence about animals possessing rudimentary forms of morality. Lloyd Morgan (1894) argued that Darwin's claims about animals were

anthropomorphic. The charge was that Darwin imposed human qualities onto animals and lacked sufficient evidence for those interpretations. Morgan believed this was unnecessary and bad and proposed an alternative way to view and present the evidence using what came to be known as Morgan's canon. Morgan's canon is a principle for interpreting animal behavior. This principle favors using theories that attribute a lower mental explanation of animal behavior when possible:

In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale (Morgan, 1894, p. 53).

This is a principle posits that interpretations on the lower level psychological scale need to be considered and preferred when they make sense. His problem with Darwin is that he jumped to the highest level explanation of animals when it was unnecessary. Morgan believed that lower psychological explanations needed be examined. His arguments challenged that animals may not even possess the precursors of morality. This began the movement towards lower level psychological explanations of animal behavior.

Ivan Pavlov (1903) exemplified this line of reasoning when he began conditioning animal responses. His research demonstrated that animals could be trained to hear certain stimuli and provide particular responses. His experiments first demonstrated how an unconditioned stimulus triggers an unconditioned response. For example, a dog smells food (unconditioned stimulus) and then salivates (unconditioned response). Pavlov showed that one could take a neutral stimulus (a bell) that would not originally trigger a certain response, and condition the animal to respond to it as a trigger (salivate). Pavlov began conditioning dogs by ringing a bell, and then providing them with food. Eventually, just by ringing the bell, the dogs would begin to

salivate, even if no food was provided. Classical conditioning showed that animals may just be getting conditioned that they were not any cognitive faculties being used.

Classical conditioning helped John Watson (1913) found Behaviorism, a movement that completely gave up studying human and animal minds. Classical conditioning gave a way to understand behavior without making reference to a mind. With the mind out of discussion, the discussion about animal moral cognition also ended. Psychologists wanted to make psychology a science and classical conditioning demonstrated that they did not need to study the mind in order to describe and predict behavior. Watson defines Behaviorism as an objective branch of psychology that avoids making unreliable or unwarranted inferences:

Its theoretical goal is the prediction and control of behavior. Introspection forms no essential part of its methods, nor is the scientific value of its data dependent upon the readiness with which they lend themselves to interpretation in terms of consciousness.

The behaviorist, in his efforts to get a unitary scheme of animal response, recognizes no dividing line between man and brute. The behavior of man, with all of its refinement and complexity, forms only a part of the behaviorist's total scheme of investigation (Watson, 1913, p. 158).

Since the mind was not directly observable, studying it was unscientific. Behaviorists held that behavior is caused by the environment and only behaviors could be studied. This became the dominant paradigm that stifled the discussion about minds, including those of animals, for a large part of the 20th century.

The rise of computers challenged Behaviorism and lead to the cognitive revolution. The revolution brought back the idea in the 1940s and 1950s that the mind could be studied. As Pinker (2002) argues in *The Blank Slate*, the advent of computers gave psychologists and

philosophers a different way to view the theory of mind. Instead, of conceptualizing the mind as something that could not be studied, it could be imagined as a computer. This idea holds that there is a relationship between the brain and the mind. The computational analogy showed that the brain could be thought of as a computer and the mind as the software running the brain. The revolution opened up the idea that the mind could be studied again. With the concept of the mind returned to the discussion, studies about the animal mind developed.

The subsequent study of animal minds has shown that animals have some remarkable cognitive capacities. Karl Von Frisch (1993) made some keen observations on the animal mind through his study of honeybees. Honeybees send out scouts to locate food. Once the scouts locate food, they return to their hives to get more honeybees to work together and collect the food. He found that they communicate with each other when foraging through two different forms of dance communication. Depending on the distance from the hive to the food, the bees would either perform a “round” or “waggle” dance. Round dances involve the bee dancing in a circular pattern while a waggle dance uses a figure eight type pattern. If the food is close, the scout honeybee performs a round dance; if farther away, the scout performs a waggle dance. The waggle dance also tells other bees the distance and the direction to travel for the resources. The argument is that honeybees are not just responding to the environment, but cognitively assessing it and then communicating that assessment to other bees.

Subsequent studies on honeybees have taken this further by arguing that they possess a cognitive map. Miller (1983) explains James Gould’s findings. Gould conducted an experiment with sugar water and honeybees. The water would entice the honeybee, but Gould gradually kept moving it farther away. At first, the scout bee would successfully rally support to collect the sugar water. However, when Gould moved the supply of sugar water into the middle of the lake,

the bees no longer came. The scout bee had the information and he performed the necessary dance to indicate to the other bees where the water was located. Even though the bees routinely visited the lake, they refused to listen to the scout's instructions to go to the middle of the lake. This suggests that the bees had developed a cognitive map, where they would not follow a command that told them that food was located in the middle of a lake since food should not be there. Cognitive maps have also been found in elephants. Viljoen (1989) found that elephants would visit resources up to 70 kilometers away. However, even with that travel, these elephants would visit the same water holes approximately every four days. Thus implying that even though these elephants travel great distances they still know how to return back to their destination.

Other animals have demonstrated their cognition through their tool use. Tools are objects that are not connected to the body that are used to achieve some end. Animal tool use is an important discovery in animals because it demonstrates that animals are not simply living in their environment but are adapting and making decisions in response to their environments which exemplifies means end reasoning. Tools allow animals to bypass obstacles to meet their ends. There have been observations of a variety of different animals using tools including but not limited to birds, fish, elephants and apes.

Shumaker, Walkup and Beck (2011) report that green-backed herons are bait fishers. These herons cannot get the fish because they are too deep for them to grab. The herons respond to this challenge by placing food at the top of the water to lure fish. When the fish come to the surface, the herons grab the fish (Shumaker, Walkup and Beck 2011, p. 40). Elephants have also been observed using tools. Holdrege (2001) explains elephants break branches off trees to scratch themselves and swat flies. An elephant in South Africa was even observed digging a hole in the ground for water, drinking the water and then ripping bark off the tree to plug the hole.

The elephant later removed the plug to continue drinking (Holdrege, 2001, p. 137). Similar tool use has also been found within chimpanzees. Fay and Carroll (1994) found that chimpanzees manufacture tools to extract termites by shoving a stick down the termite dens and then pulling out the sticks with the termites on them. The termite fishing chimpanzees utilize their environment in order to meet their goal (Fay and Carroll, 1994, p. 315).

Van Schaik (2006) reports that orangutans also use tools in their various camps in the Sumatran swamp. This case is particularly important because these orangutans are all separated by water and have no ways of communicating; however, they all have the same environment and yet have drastically different responses to their environment. For example, neesia fruits, a highly nutritious and ubiquitous resource on the Sumatran islands, ripen quickly and become surrounded with stinging hairs making them inedible. Almost all of the orangutan camps leave the fruits alone after they ripen. However, one camp consistently uses sticks to scrape off the hairs to eat the fruit. This demonstrates their ability to bypass obstacles to meet their objective which other orangutans have not figured out. Another reported difference occurs on Suaq, an island with a northern and southern part. Both sides have a high population of insects and both orangutan tribes forage for them. However, the northern orangutans are seven times more likely to forage for food with tools (Van Schaik, 2006, p. 67-69).

The cognitive revolution opened up a lot of doors within the field of animal psychology. It is now acceptable to discuss minds and researchers have returned to question about animal moral cognition. The question is no longer whether animals possess a mind. Within this field, animals are now widely accepted to possess some cognitive skills. What those skills entail and what animals do with them is a much more controversial subject. The question this paper

considers is whether these animals do possess some type of moral cognition. The next section describes the current evidence in favor of animal moral cognition.

2. Evidence for Animal Morality

2.1 Empathy and Altruism

Empathy is the recognition of the emotions of others and the process of feeling something for others. Altruism is the act of helping to preserve and help another. These are important qualities for animals to possess to demonstrate that they have some notion of moral conduct. Empathy and altruism are some of the foundations of human morality. Humans that lack empathy and altruism are usually considered sociopaths because they lack any sense of moral responsibility or care. Empathy is what allows people to realize that other people have value, thoughts and feelings whereas altruism is the decision to take action on those thoughts by caring for others. Studies and observations have provided support that animals possess these qualities.

Rats have been shown to possess empathy. Church (1959) set up an experiment that had rats press a lever in order to receive food. Every time a rat pressed the lever, it would receive the food but it would also send an electric shock to a neighboring rat cage. The experiment found that when the rat could see the other rat, it would not push the lever even when it was hungry (Church, 1959, p. 134). In another experiment on rats, Rice and Gainer (1962) found that rats would alleviate the stress of other rats. When a rat was hanging in the air, in an uncomfortable position, the other rat would press a lever in order to lower the distressed rat (Rice and Gainer, 1962, p. 167). Wechlin, Masserman and Terris (1964) study on rhesus monkeys further exemplify this point. In the study, the monkeys ignored immediate gratification (food) to save another primate from being electrocuted. Each time a monkey was fed, they would observe another monkey being electrocuted. The monkeys quickly changed their desire to eat the food to

avoid the electrocution of the other monkey. In an effort to control for hunger, the monkeys were not fed so they had every incentive to take the food. Yet, they still chose to prevent another's pain by skipping the food, suggesting that these monkeys possess altruism (Wechlin, MAsserman and Terris, 1964, p. 584-585).

De Waal (2009) also observed that bonobos are capable of empathy. He witnessed a bonobo named Kuni helping a bird. Kuni found the bird in her cage, picked it up, went to the highest branch of her cage, opened her arms up, unfolded the bird's wings and threw the bird towards the opening of the cage. Although Kuni was unsuccessful in helping the bird, De Waal has argued that Kuni was empathizing with the bird. Since Kuni had observed birds before, she was trying to help the bird by climbing to the highest part in attempts to free the bird. De Waal argues that this is an example of a Bonobo taking on the perspective of another creature (De Waal, 2009, p. 30-31).

Chimpanzees have also been shown to display empathy. De Waal, (1996) observed that when a chimpanzee dies, other chimpanzees rub their eyes and whimper. Some even cry. Collectively, some chimpanzees even act empathetically as de Waal explains in his observation of a chimpanzee habitat in the Netherlands. Two chimpanzees, one ironically named "Gorilla" and another "Oortje," were playing together when Oortje collapsed to the ground lifelessly. Gorilla made a hysterical yell. Zookeepers rushed over to try and revive Oortje but were unsuccessful. She died of heart failure. The habitat, which was normally very noisy was silenced by one female chimpanzee's brief scream.

The silence after death is not an anomaly, but the norm. In another instance at the colony, two chimpanzees fought with each other. One of the chimpanzees suffered severe injuries. The zookeepers spent hours trying to mend his wounds. Eventually, they put him back in his cage. He

died shortly after. That entire evening the normally noisy chimpanzee colony was silent. The silence persisted in the morning even when the zookeepers fed the chimpanzees. Vocal activity resumed only after the deceased chimpanzee was removed from his cage. De Waal argues that the acknowledgement of the death, as well as the disruptive presence of the deceased, suggests a deep level of caring by the colony (De Waal, 1996, p. 54-55). De Waal (2009) observed this in other facets of chimpanzee behavior. For example, sometimes when an adult chimpanzee loses a battle, a juvenile chimpanzee will put his hand on the defeated chimpanzee. De Waal has argued that this is consolation, a form of empathy (De Waal, 2009, p. 34).

Elephants have also been claimed to grieve the loss of loved ones, even long after the death. For example Moss (2000) shares the story of Agatha, a bull elephant who lost her mother. For years, Agatha routinely visited where her mother died. She would use her trunk to examine, and touch her deceased mother's skull (Moss, 2000, p. 42). This is strikingly similar to how humans cradle a deceased family member and routinely visit a grave to pay respect. In the case of Agatha, there is no logical explanation as to why she would visit the bones, cradle the bones, and choose those specific bones year after year, other than some form of morality evidenced by connecting with, mourning for and paying respect to the deceased.

Another observation from Moss (2000) clarifies this point. Tina, Trista and Teresia are elephants. Moss's observation is from a day she observed a poacher shooting and killing Tina. Moss recounts the efforts of fellow elephants Teresia and Trista to save Tina.

Teresia and Trista became frantic and knelt down and tried to lift her up. They worked their tusks under her back and under her head. At one point they succeeded in lifting her into a sitting position but her body flopped back down. Her family tried everything to rouse her, kicking and tusking her, and Tallulah even went off and collected a trunkful of

grass and tried to stuff it into her mouth. Finally Teresia got around behind her again, knelt down, and worked her tusks in under her shoulder and then, straining with all her strength, she began to lift her. When she got to a standing position with the full weight of Tina's head and front quarters on her tusks, there was a sharp cracking sound and Teresia dropped the carcass as her right tusk fell to the ground. She had broken it a few inches from the lip well into the nerve cavity, and a jagged bit of ivory and the bloody pulp was all that remained (Moss, 2000, p.73).

Moss argued that these elephants were empathetic and altruistic to Tina. They waited all day and into the night aiding her by sprinkling dirt on top of her, breaking off branches and placing them by her, attempting to get her back on her feet and looking for predators (Moss, 2000, p. 73-74).

Another report by De Waal (1996) exemplifies the altruistic nature of some non-human animals. A baby lemur climbed an electric fence, was electrocuted and fell. The mother of the lemur did not appear to care. This is odd considering de Waal's observations. "Female mammals, for example, threaten almost anyone or anything that approaches their young uninvited. They may do so in different ways or to different degrees, but maternal protection is widespread and highly predictable" (De Waal, 1996, p. 122). However, the injured lemur's grandmother rushed over and picked up the lemur and brought it to a safe location. The following event is captured and explained by De Waal.

Three infants start a roundrobin game among themselves near the dazed one, occasionally interrupting their play to take turns briefly grooming the victim. When the group of lemurs moves off, the infant climbs on the back of her mother, who has not been near her for over an hour, and succeeds in riding on her. The mother, known as rather rejective, suddenly sits up to violently shake the infant off her back. The grandmother responds instantly by attacking

the mother, which results in the mother's allowing her daughter to remount and stay on for a longer distance. Five minutes later, the group settles down. The infant rests on her mother's ventrum like other infants in the group. She now appears fully recovered (and indeed survives without noticeable damage) (De Waal, 1996, p. 59).

De Waal has argued that this is another example of animals taking care of each other. Even though the mother did not seem to care, the grandmother stepped in to take her place.

2.2 Cooperative Behavior

Animals do not simply live together but they also cooperate. Cooperation is important for the context of this paper because it exemplifies animal norms, enforcement and punishment. These are aspects of justice, an important aspect of morality. A wide variety of social animals have been found to possess cooperative behavior including dogs, wolves, hyenas, wallabies and chimpanzees.

Dogs have been found to communicate their behavior to ensure cooperation. Bekoff (1995) observed dogs bow to signal to other dogs that they “want to play” or that they “want to continue playing” (Bekoff, 1995, p. 419). If an animal was harmed during the play, the harmer would bow as if it were an apology. Whenever the rule of not harming each other was broken, Bekoff observed that the dogs would act surprised or confused. “For example, a dog or wolf may cock her head from side-to-side and squint, as if she is wondering what went ‘wrong’ when a play-mate becomes too assertive or too aggressive” (Bekoff, 2004, p. 493). The argument is that animals are having some expectations when they engage in fair play and when those expectations are not met, there is confusion. Bekoff argues that some animals have the norm of fairness and often exemplify this norm through their play. Social animals like to play. It is a form of social bonding. Dogs frequently nip, wrestle and bite each other while playing. However, they rarely

break skin. That is not their intent. Instead, they are engaging in play, rarely escalating into aggression. Bekoff argues that they refrain from that escalation because like humans, being fair feels good for social animals (Bekoff, 2004, p. 493).

Other animals are also known to cooperate with each other. Wolves cooperate with each other during hunting.

Wolves, for example are seen running together in pursuit of an elk in what appears to be a beautifully choreographed strategic dance. One wolf weaves left, another weaves right, one stays dead center. Together they take down an elk far too large for any single wolf to take individually. After the kill they take turns on the carcass (Bekoff and Pierce, p. 64. 2009).

Even after the kill, these wolves take turns eating instead of competing with each other. Bekoff and Pierce argue that the turn taking is important because it represents a degree of fairness within these animals (Bekoff and Pierce, 2009, p. 64).

Other species of animals have also been found to cooperate. Drea and Frank (2003) found that hyenas cooperate with each other to procure food. Hyenas would pull on a rope together to open a trap door which released food. Their study also showed that when a hyena did not know what to do, the other hyena would either change roles or position so that the task could still be completed (Drea and Frank, 2003, p. 139).

Boesch (2002) found cooperation, fairness and social roles with some chimpanzees. Chimpanzees frequently cooperate with each other in order to take down faster moving monkeys. They assign roles to each other. Some are ambushers, while others are chasers, blockers and drivers. Ambushers prevent the escape of the prey. Chasers typically capture the prey. Blockers force the prey towards the driver and drivers force the target to move in a specific way. The

hunters work together in order to procure the most game. However, they also act fairly by dividing the food up differently according to their roles. No chimpanzee gets the entire kill even though it is only one chimpanzee that physically catches it. They share. Each chimpanzee gets a certain amount. The catcher gets the most meat, then the ambushers, and then those with the less important roles (Boesch, 2002, p. 41-42).

Animals that do not cooperate and play fairly get punished. Punishment is a very important because it demonstrates that there are repercussions for acting poorly within animal cultures. Sussman and Chapman Horowitz (2002) observed punishment when a dog interrupted two other dogs playing together, the playing dogs teamed up and chased the other dog away. Once the interrupter was gone, the two dogs resumed playing. These dogs engaged in a cooperative fashion to punish the rule breaker.

Watson and Croft (1996) found that adult wallabies self-handicap themselves to avoid punishment. They tailor their play to the other wallaby in the group. For example, adult wallabies play defensively with younger and weaker wallabies. Additionally, instead of forcefully sparring with the younger wallabies, the adult wallabies paw gently. When both wallabies are adult, they are much more competitive with each other (Watson and Croft, 1996, p. 342). Von Rohr, Bukart and Van Schaik (2011) found that chimpanzees also handicap themselves to play with their young. When they break established norms and perform aggressive acts, or even kill the infants, there are excessive vocal protests from the adult chimpanzees that sometimes even leads to nonfamily members intervening (Von Rohr, Bukart and Van Schaik, 2011, p. 25). Clutton-Brock and Parker (1995) report that chimpanzees not only cooperate when hunting in packs, but when chimpanzees do not support the group, they get attacked by the cooperative group of chimpanzees. They also report findings that show that wasps bite, chase, and grapple lazy

workers. Naked mole rats attack lazy workers in a similar fashion (Clutton-Brock and Parker, 1995, p. 373-4). Mulder and Langmore (1993) found similar behavior in wrens. Wrens raise their children to hunt for food at an early age. In their study, they temporarily removed some wrens from this raising process. When those wrens were placed back in the group, they were attacked. Wrens who were removed from the non-breeding part of the season seasons were never attacked when they were returned (Mulder and Langmore, 1993, p. 831).

3. Moral Cognition

3.1 Interpreting the Evidence

There are currently three prevailing theories about what this evidence means. Bekoff and Pierce have argued that the current evidence demonstrates that animals have moral emotions and a sense of moral intelligence. They argue these animals possess reciprocity, cooperation, empathy, altruism and justice. When these qualities are combined, they believe it constitutes a system of morality that closely parallels human morality. "We argue that equitable, altruistic, cooperative, and empathic behaviors taken together represent a system of morality that functions in certain societies of animals, just as it functions in societies of human" (Bekoff and Pierce, 2009, p. 38). Under their view, animals may not act exactly like humans; however, that is largely because morality needs to be tailored to the animals. They do not defend a view that says morality is a universal system that is the same for each species. Instead, they posit that wolf morality is different than elephant morality and different animals bring different perspectives about what they perceive to be fair, just and moral. Bekoff and Pierce believe that every animal animal needs to be evaluated by their species relative standards.

Another explanation of this evidence comes from De Waal. He does not think that human morality necessarily has to be exclusive to humans. In fact, he argues that "the building

blocks of morality are evolutionary ancient” (De Waal, 2009, p. 7). He believes that some animals possess a form of empathy. However, he argues that the type of empathetic qualities these animals have varies considerably. De Waal (2009) distinguishes between different types of empathy. At the highest cognitive level there is *attribution*, where the empathizer completely comprehends what the other is feeling. There is also *cognitive empathy* where the empathizer can assess the situation and the reasons for the other’s emotions. At the surface level of empathy there is emotional contagion. *Emotional contagion* is an automatic empathetic response. De Waal believes that many social animals possess emotional contagion, but only great apes possess a form of *cognitive empathy*. Cognitive empathy requires the ability to understand another’s perspective. Monkeys routinely do not display cognitive empathy which is evident when they fail to take on the perspective of their newborns. For example, when monkeys enter water, they often times take their newborn with them. These newborns do not know how to swim and end up drowning. It takes each new mother time to learn this, whereas the great apes already know how to take the care of the needs of their children and will keep their offspring away from the water because they have cognitive empathy. De Waal believes at least some apes have the capability of emotional cognition; yet none of them possess attribution and thus no animal possesses genuine morality (De Waal, 2009, p. 38-39).

Unlike Bekoff and Pierce, he does not think that possessing reciprocal, cooperative, empathic, altruistic and justice related behavior constitutes genuine morality. He agrees with Hume and Darwin. Genuine morality requires a sense of reflection which he does not believe even the great apes possess. Instead, De Waal believes the process of war and hostility gave humans a need and the motivation to reflect on their actions and create moral systems which other animals do not possess:

In our own group species, nothing is more obvious than that we band together against adversaries. In the course of human evolution, out-group hostility enhanced in-group solidarity to the point that morality emerged. Instead of merely ameliorating relations around us, as apes do, we have explicit teachings about the value of the community and the precedence it takes, or ought to take over individual interests. Humans go much further in all of this than the apes, which is why we have moral systems and apes do not (De Waal, 2009, p. 54).

De Waal argues that the process of understanding precedence and going beyond individual interests in support of the community is what allows humans to have morality. De Waal thinks animals do not reflect upon their actions and therefore are not genuinely moral.

Mark Rowlands articulates a third view in *Can Animals be Moral* (2012). Rowlands distinguishes between moral patients, agents and subjects. It is important to understand the distinction between these forms of morality because Rowlands theory relies on these distinctions. If an animal is a *moral patient*, it can make claims on others about how they ought to be treated. This means that the animal's interest should be taken into consideration when another decides to act upon them. Currently, most agree that animals are at least moral patients and that they should be treated with a certain degree of respect (Rowlands, 2012, p. 83). However, the respect that animal have for each other and whether they are cognitive is still a controversial discussion that is at the heart of this paper. *Moral agents* are assumed responsibility and their actions are worthy of blame and praise; they are responsible for their actions. The focus on the *moral agent* is about the evaluation of their actions (Rowlands, 2012, p. 35-6). Rowlands does not defend a view that advocates animals are moral agents. Instead he argues that some animals are *moral subjects*. A *moral subject* does not require the actions to be evaluated or held responsible. Being a *moral*

subject requires that one be motivated by moral considerations. These moral considerations require some type of concern. These concerns can be positive or negative, for example, sympathy or anger. These concerns give rise to moral judgments, where actors have reasons and make decisions to act in particular ways (Rowlands, 2012, p. 33).

Rowlands' thesis is that "animals can be moral subjects in the sense that they can act on the basis of moral reasons, where these reasons take the form of emotions with identifiable moral content" (Rowlands, 2012, p. 35). Rowlands' view works like this. When animals experience a situation that has moral content, their empathy allows them to understand, sympathize and then provide reasons for them to act in certain ways. These ways can be considered moral. An important and subtle distinction occurs in his theory. "A cause does what it does – it causes whatever it, in fact, causes. A reason motivates in virtue of its content" (Rowlands, 2012, p. 35). If something merely causes an action, then the actor has no decision. This is an automated response. Reasons on the other hand create motivations to act in certain ways. It is a decision to act one way or another. Rowlands posits that animals can have moral reasons that allow them to make judgments to act in certain ways. This is important because if animals are merely caused to act in certain ways then they are exemplifying what De Waal deemed as emotional contagion and not cognitive empathy.

Rowlands (2012) argues directly against Bekoff and Pierce. He characterizes Bekoff and Pierce as taking the perspective of animals being *moral agents*. Rowlands does not think that animals can be considered moral if they have to be agents. Additionally, Rowlands does not believe that the sum of cooperation, altruism, empathy and justice indicate morality. Rowlands finds Bekoff and Pierce's explanation lacking because they do not discuss the motivation behind the behavior which is required for it to be moral cognition (Rowlands, 2012, p. 22-3).

Additionally, he argues against their conception of justice because when it is catered towards individual animals it seems “unsurprising” that animals meet a broad definition because animals “turn out to have a sense of justice only because the concept of justice has been defined in such a way that it is the sort of things animals can possess” (Rowlands, 2012, p. 31) Rowlands believes that their definition is trivial because justice just breaks down to a set of expectations that animals abide. It is not meaningful in anyway and a case could be made for practically any animal to meet this definition. The problem is the way Bekoff and Pierce’s define justice makes it an analytic statement.

Rowlands also disagrees with De Waal, Darwin and Hume because he does not think that a reflection condition is important for morality.

For an individual to act morally, I shall argue, it is not necessary that she have the ability to reflect on her motives or actions; nor does it require that she be able to explicitly formulate or understand the principles on which she acts, nor that she be able to adopt an impartial perspective of the sort required for a sense of justice (Rowlands, 2012, p. 22).

The abstract reasoning and principle formulation of artificial virtues and community are not necessary for moral cognition. Reflecting in those ways may be sufficient for morality, but it is not necessary. Rowlands believes his distinction between a moral subject and agent answers the reflection problem. Being morally cognitive is not about having an action being reflecting on an action but about being motivated by moral content and acting on the basis of those moral motivations.

I largely agree with Rowlands’ theory and will defend it in some unique ways throughout this paper. I believe that Bekoff and Pierce’s theory suffers because they do not evaluate the motivation of animals. However, I agree with Bekoff and Pierce’s conclusions that animals have

morality; but I disagree with their reasoning. Bekoff and Pierce fall short in explaining why the behavior of animals demonstrates moral cognition. They do not look closely at the motivation behind these acts and they seem to just assume that there is motivation behind this behavior.

Bekoff and Pierce's argument that the sum of cooperation, altruism, empathy and justice constituting morality is unpersuasive considering an animal may possess this behavior but simply be conditioned to act this way because the fear of punishment. That fear does not make the action moral. The motivation for action is quintessential for deciding whether an animal is morally cognitive. Bekoff and Pierce are right insofar about animals possessing moral qualities, but they simply do not go far enough in explaining their theory and providing a justification as to why animals have moral cognition.

I hold less agreement with De Waal. I will argue later about how the reflection condition is unnecessary for moral motivation. De Waal fails to examine the motivation behind the behavior. Once that evidence is examined, it provides strong reasons to see how animals are being morally cognitive. Thus, I disagree with his claim that animals are only capable of emotional contagion. I argue that most animals are capable of cognitive empathy. Furthermore, cognitive empathy is sufficient for bringing about moral cognition once the realm of motivation is examined.

I hold the least amount of disagreement with Rowlands. His book is preoccupied drawing the distinction between moral subject and agent and as a consequence his theory suffers from never applying his theory to the evidence he claims supports it. I will provide arguments as to why his answer of moral subject makes sense and is captured by some of the observations of animals. However, my largest problem with Rowlands is that he ignores the importance of social norms have on motivation. This is problematic because norms are an essential part of moral

systems since they prolong the systems and provide motivation. There is ample evidence to demonstrate that animals possess these qualities.

3.2 Moral Motivations

Now I am going to examine some of the current evidence searching to see if there is any moral motivation. I will be providing examples where animals experience situations in which they empathize with other animals, and motivated by virtue of moral emotions and act to aid those animals. This is important in the context of Rowlands' argument because this elucidates that animals cannot just be theoretical moral subjects, but are in fact moral subjects. Three examples will prove this point. The first shows cross-species moral motivation. The second demonstrates extreme empathetic moral motivation and the last presents an animal moral motivation that goes against self-interest.

Recall De Waal's (2009) observation of Kuni the bonobo who attempted to help save the bird. When Kuni tried to help the bird escape the cage, Kuni was empathizing with the bird. Instead of leaving the bird there, Kuni picked it up. This shows that Kuni cared about the animal and did not leave it on the floor. This is an example of Kuni empathizing with the bird. She realized the bird was in pain and she attempted to allay it, she was *motivated*. That is the moral content that this evidence provides. Kuni then attempted to help the bird. She climbed to the highest branch of her cage and carefully opens the birds' wings to try and let it fly. Her final act of throwing the bird towards the opening in the cage elucidates her intent. She wanted to free the bird from its entrapment. Kuni was motivated to act. She was motivated because she empathized with the bird. She made the decision to climb a tree, open the bird's wings slowly and try to let it escape from the cage. This cross-species empathy demonstrates a sense of morality similar to what we might expect from a human. There are situations in everyday life where people

empathize with others and are motivated to act morally to help others. This is precisely what Kuni did.

Moss's (2000) example of Tina, Trista and Teresia also indicates strong empathic reasoning and altruistic action in animals. This is an example of the degree how far moral motivation can take animals. When the poacher shot Tina, Trista and Teresia did everything they could to help their sister. These animals were confronted with a problem. Their sister was on the ground and would not get up. They empathized with their sister's pain to a large degree, which is evident by their actions. That is why they kick her to try and move her, used their tusks to attempt to get onto her feet and even break their tusks in the process. They even try to give her grass to provide her nourishment. An explanation of their behaviors does not make sense outside of their ability to empathize, and then act in a self-sacrificial manner. The only way to explain their altruism is if they had some deep motivating moral reason to act.

Reviewing the findings from Wechlin, Masserman and Terris's (1964) study on rhesus monkeys also elucidates moral cognition. These rhesus monkeys empathized, and were morally motivated to act even against their own interests. Since the monkeys were hungry, they had reasons to pull the chain to get the food. However, doing so would electrocute other rhesus monkeys. The fact that they did not pull the chain demonstrates that they have empathy, but also demonstrates their decision making power. The rhesus monkeys could have pulled the chain, but they overwhelmingly decided not to because it inflicted pain upon other monkeys. This is not the only interpretations; clearly others exist. The easiest one could be that the monkeys did not like the screams and shocks when they pulled the trigger. However, they also received the food when they pulled the trigger. Yet, even when they became extremely hungry, they did not choose to acquire food by hurting other monkeys. Even if the stimulus of a monkey screaming is negative,

at some point, the positive reward of sating their personal hunger should trump that negative stimulus, but it did not. Thus, they had conflicting desires which bolsters Rowlands' claim that animals acting on emotionally laden reasons which give them motivation to act in a certain way.

When evaluating these actions it becomes increasingly problematic to give instinctual or rudimentary forms of moral attribution to account for this behavior. Instinctual answers suffer because of the sheer intricacy of these acts. Animals are not placed in these situations to be conditioned to act in such remarkable ways. The precursor argument is also unpersuasive because these animals show that they are motivated to put others' interests above their own and act in moral ways. The ability for animals to empathize with each other is not simply causing these animals to act in a way, but it is giving them reasons to consider acting in a certain way. The fact that they are empathizing with another animal, using moral content to generate motivation to act, is a clear demonstration of their moral cognition.

Animal Norms 3.3

Norms are a very important part of moral systems. Much of what society claims about being good or bad, moral and immoral is whether actions meet the norms of society. When norms are violated, actors are usually punished. My biggest issue with Rowlands is that he largely ignores the importance of norms and the way can influence and *motivate* behavior. Sripada and Stich (2006) argue that norms play a very important part of human motivation. "Perhaps the most striking and most overlooked feature of norms is that they have powerful *motivation effects* on the people who hold them. Philosophers have long emphasized that from a subjective perspective, moral norms present themselves with a unique kind of authority" (Sripada and Stich, 2006, p. 285). They argue that these norms have powerful motivating effects for eliciting responses against the rule breaker. When a rule is broken, people

becoming motivated to punishment against the person who broke the rule (Sripada and Stich, 2006, p. 294).

It is clear that some animals hold a similar perspective with norms. The evidence shows that animals engage in norms of fair play, cooperation and punishment those who do not conform to the social norms. Bekoff (2004) provides the norm of fair play. Dogs nip and scratch each other but do not hurt each other. Not hurting each other during this play is the norm which I will call “fair play.” When fair play is broken, these dogs stop playing, act confused and make gestures towards each other to communicate that that this was not their intent. The Watson and Craft (1996) wallaby study shows similar tendencies to engage in the norm of fair play by handicapping each other. These wallabies do not hurt each other, yet they engage in rough housing. Whenever they break these norms they are attacked by other wallabies because they view that a norm has been violated. This parallels to Sripada and Stich’s (2006) discussion of human norms generating motivating behavior.

There are grounds to make the argument that animals have a primitive form of justice that differs from Bekoff and Pierce’s (2009) species relative justice. Justice is a moral norm that some animals possess. However, justice is a broad concept that needs to be unpacked. It requires fair distribution, where equity, resources and positions are assigned fairly. Justice also requires retribution, where actors that act wrongly get punished. Justice also needs to be restorative, when a wrong act has been committed; it is “just” to at least assuage the effects of the unjust act. All of these are important aspects of justice. If this is accepted as being a system of justice, then it becomes clear that justice is not a uniquely human quality.

Boesch’s (2002) chimpanzee study shows that some animals have a norm of fair distribution which in return exemplifies a distributive form of justice. The chimpanzee which

captures the prey does not get the entire game. After the hunt, the chimpanzees distribute the food on the basis of their assigned roles. Every chimpanzee may not get the same amount of food, but they all get some. Bekoff's (2009) example of wolves hunting together in packs capture the same type of distributive justice. These wolves all work towards the kill, and allow each other part of the kill to eat.

Many animals also display retributive justice because when these norms are broken, there is punishment. Horowitz (2002) observed dogs cooperating to punish intruders of fair play. Watson and Craft (1996) reported that wallabies risk being attacked by other wallabies if they attack too hard. Von Rohr, Bukart and van Schaik (2011) provided accounts that chimpanzees protest and intervene when other chimpanzees act aggressively toward their young. Clutton-Brock and Parker (1995) found that chimpanzees attack those who do not cooperate on hunting expeditions. These are observations of social animals, living with norms and enforcing punishment when those norms are broken.

Some animals have also been shown to have justice norms related to restoration. Recall De Waal's (1996) example of the mother lemur who did not aid her child after it was electrocuted. The mother was scorned by her society because she was breaking a societal norm of the lemurs – to take care of their young which. There is a retributive action taken against this lemur for behaving out of her societies expectations, but there is also an act of restoration. The lemur's grandmother tries to take care of the wounded. The mother eventually takes care of her child. These animals appear to be ameliorating the wrong. Animals clearly do have a sense of justice that they abide by. They have expectations, but they also treat each other in certain ways that prolong a system of justice. When those expectations are broken, there is punishment and attempts to restore the system. The animal conception of justice may not be as formal as ours,

but that does not mean that there is not a primitive form or that it does not provide any morally motivating effects on how to act.

4. Objections

4.1 Anthropomorphism

I have argued that some animals possess moral cognition. Some may argue this is anthropomorphic. Anthropomorphism is the attribution of human qualities onto non-human entities. In this paper there are two different anthropomorphic arguments that could be levied against my thesis. The first argument is categorical anthropomorphism. Categorical anthropomorphism holds that some qualities can never be possessed by virtue of the definition of the quality. In this context, categorical anthropomorphism posits that animals and humans have differences that belong to different categories. This means that there are certain concepts or faculties that animals do not have the capability to have or comprehend.

The argument about categorical anthropomorphism is illegitimate. Keeley (2004) provides a good reason for rejecting this argument because it is really a misrepresentation about the claim being made about animals. Animals share the same biology and all animals are part of one massive family tree (Keeley, 2004, p. 533). The categorical anthropomorphism argument gives no reason to think that humans are the uniquely possessors of mental or cognitive faculties. There is an unqualified assumption that the human categories are not also *shared* by animals. It makes no sense to assume that these alleged traits are a human trait and not a mammal trait. Thus, when a claim is made about an animal possessing an allegedly human trait, it does not make sense to view it as anthropomorphism but an argument about mammalomorphism (Keeley, 2004, p. 536). This makes sense in the context of assessing the moral qualities in animals. I hold the view that morality is a natural phenomenon. Morality can and should be viewed like a

heart or brain. It is not something that is uniquely human, but that is shared throughout all mammals. It is the burden on the skeptic demonstrate why this is not mammalomorphism.

The second argument pertaining to anthropomorphism is the projection of human qualities onto animals. A useful way to understand this objection is to look back at Morgan's canon. That principle posits that explanations that lower level psychological explanations should be preferred when warranted. This is how a person avoids anthropomorphizing. However, if those lower psychological explanations cannot explain the actions, then those explanations must be rejected. Kuni, the bonobo is a good example of how a lower psychological explanation would fail to provide a compelling explanation. It makes far more sense to accept an interpretation of Kuni being a cognizant, empathizing, caring and morally motivated creature. The rest of this paper provides a plethora of evidence that shows that animals possess these allegedly anthropomorphic qualities. If being moral is exemplified by empathizing, feeling and being motivated to help another then I believe it is clear that some animals are capable of being morally cognitive. The evidence generated by Moss, Bekoff, De Waal and others demonstrate that animals do exemplify these qualities and there needs to be a broader understanding of who possesses these qualities in the animal kingdom. If we are not prepared to grant those accounts as being moral then I believe it is difficult to regard much of any human action as being moral. If we accept similar human actions as being moral then there is no reason to reject my word choices about animal qualities when humans acting in the same ways are viewed as possessing these qualities.

4.2 Biological Preservation

Another argument that could be levied against my thesis is that animal action is really just self-interested. Animals are just acting in ways to prolong their genes and avoid

consequences. Thus, the advancement of animal behavior could be viewed not as a moral decision, but a selfish act. This objection is answered by two different arguments. First, this is not a unique indict against animals, but of mammals. Second, the actions of animals and humans have discredited this argument.

The fundamental problem with this objection is that the same argument could be made against human morality. Everything one could say about animal morality could also be said about human morality. Thus, this becomes an argument not about animals but about mammals. This objection does not carry any weight. If the skeptic believes that this is a legitimate argument then it seems that the concept of morality is itself a sham and holds no bearing on cognition or motivation. If this argument is accepted, then it is only fair that the same skepticism is placed on human behavior. If the skeptic is not prepared to do that, then this objection needs to be withdrawn.

The other reason why this argument should be recanted is that it has been discredited by humans and animals. What explains a soldier jumping on top of a grenade to shield his or her comrades from its blast? How is that decision based on selfishness or avoiding a consequence? It is not. Animals provide similar types of altruistic acts that counteract the hypothesis that they are just prolonging their genes. The Wechlin, Masserman and Terris's (1964) study on rhesus monkeys demonstrates that some animals act against their self-interest. These monkeys did not pull the lever and sacrificed their own wellbeing because they did not receive food. In no way is this self-interested. The question becomes, what explains the behavior? It only makes sense to attribute moral cognition. De Waal's (2009) Kuni observation also invalidates this argument. In what way did Kuni benefit from helping the bird? It does nothing for Kuni's wellbeing or her genes. Kuni is also not going to suffer any kind of bonobo retaliation for her ill treatment of the

bird. The only logical explanation is that Kuni was making a moral decision. It is clear that humans and animals seem to be motivated in ways that counterattacks the self-interest hypothesis and being consonant with a moral standard.

4.3 Questionable Evidence

The next objection I will address is the argument about questionable evidence. A lot of the evidence presented is not conducted in a lab and it is not easily replicable. Much of the evidence comes from qualitative observation and not statistical manipulation of data generated within controlled conditions. However, attacking this paper on this ground is really an attack on the field of animal studies. Part of the problem is that people use classical conditioning to train animals. Replication of certain experiments requires classical conditioning, but its use makes it difficult to interpret the results of the animal behavior as genuinely cognitive, and not classically conditioned. The environment in which the animals operate impacts the manner in which they present themselves. For example, as Van Schaik (2006) explains, orangutans in a zoo act differently than those found in the wild. If there is such grave concern that animals are simply being taught to react in certain ways, and are not actually capable of producing general cognition, then it is important that field observations, like those referenced throughout this essay, be included. Even if the researchers allow bias to influence their interpretations, they are guilty of exaggeration, not fabrication. Furthermore, the possibility of biased interpretation exists, to varying degrees, in all research, which means there is no legitimate warrant for this attack other than a desire to limit claims of moral cognition to the human realm, which represents a clear bias in the opposite direction. At the very least, researchers should be open to the possibility of moral cognition in animals as the researchers design their experiments and conduct their observations.

4.4 Animals Lack Minds

A fourth objection that may be raised is the simple rejection that animals have minds. As discussed previously, the belief that animals lack minds dates back at least as far as Descartes. However, there are numerous examples in this paper, from the animal communication in the bees' waggle and round dances and their rejection of data that does not conform to their cognitive maps to the tool use of many animals, including the elephant that created his own water plug, that support the argument that animals have minds. Perhaps the most interesting argument in defense of animals mind is found in Call and Tomasello's (2008) study of the chimpanzee mind.

Chimpanzees have been shown to discriminate and respond in unique ways to particular circumstances. Call and Tomasello's experiments provide credence to the notion of chimpanzees having minds. They placed chimpanzees in booths to compete with humans for food. The chimpanzees and humans were on opposite sides of a booth. Food was placed in the middle and the chimpanzees had to decide how they were going to procure it. They could either grab the food through an opaque barrier (one that hid their action from the human) or a clear barrier (one that showed the human). Chimpanzees consistently chose to approach the food through the opaque booth. The fact that the chimpanzees preferred to use the tunnel where the human could not see their arms demonstrates an understanding of tactics and an ability to envision a human's perspective. The argument is that if they put their arms through both barriers then they clearly did not understand the human's perspective. However, choosing the barrier through which they thought the humans could not see demonstrates an understanding of human vision and intent.

Chimpanzees made the same decision to go through the uncontested option when the variable was changed. Instead of using a clear and unclear barrier, researchers used two different doors for chimpanzees to grab food. One door was noisy, the other was silent. If a noisy door

opened, the researcher would grab the food before the chimpanzee could. The food was not taken away if the chimpanzee opened the silent door. As soon as the chimpanzees recognized that one door was noisy, the silent door was used consistently. In both experiments, from the first round, the chimpanzees preferred to use the opaque path and the silent door. This is important because it subverts claims that these animals were conditioned to open the door. If they were conditioned, it raises a major question as to what accounts for their preference to initially choose the less contested doors.

4.5 Reflection

Hume, Darwin, De Waal and Kant have all argued that some type of reflection is necessary for morality. I present arguments that the reflection condition is not a prerequisite for morality and animals can be moral even absent reflection. I will be addressing each of their respective arguments and then providing justifications as to why animals do not need to have reflection in order to be moral. At times, there is some overlap in my arguments when it is warranted. I will begin my examining Hume.

Hume believed that the reflective capacity allowed for the artificial virtues to develop and thus systems of morality. However, even though reflection may be uniquely human, I have provided arguments that animals do possess the artificial virtue of justice at least in a primitive sense. Animals live together, cooperate and abide by norms. Those norms form a system of justice that has distributive, retributive and restorative qualities that project values that go beyond themselves. It is true that we should limit conclusions to those supported by the evidence. However, my review of that evidence should not be obstructed by an *a priori* assumption that animals cannot have an artificial virtue when clearly they possess at least a rudimentary form.

Even if animals are not credited with having a genuine form of justice, Rowlands provides a reason why the reflection condition is unnecessary for morality. Animals do not need to be evaluated as moral agents, but as moral subjects. This distinction has great importance in deciding whether animals are being morally cognitive. Morality can be judged by evaluating the action. That is what reflection allows. However, that is a sufficient, not a necessary condition. Morality can also be viewed as actions that are driven by moral considerations. Applying Rowlands' theory to the evidence, it becomes clear that animals are motivated to act morally by their moral considerations. The section on animal moral cognition provided three different examples of animals being motivated to act by moral considerations.

Reflection also does not explain the majority of alleged human moral action. Humans consider their actions to be moral when they act in similar ways. A person who runs into a burning building to save a neighbor's child would be considered committing a moral act. That person's act is not considered moral after the fact, but by the act itself. The reflection about the action comes after the act, not before. However, those actions are, and should be considered moral at the time of action. Animals that operate on those types of moral considerations should also be able to have their actions considered moral.

Darwin held a similar perspective to Hume. He believed that highly sophisticated creatures would develop a moral sense that had a reflective capacity to help guide decisions. It seems that Darwin is making arguments that are similar to Hume's artificial virtues and reflection. Therefore, all three of the arguments against Hume equally apply to Darwin. Animals may possess artificial virtues through their primitive forms of justice and the reflection capacity has no bearing on the moral motivation to actually act.

De Waal also largely had the same perspective as Hume. He believed that animals may possess empathy, but most only possessed emotional contagion. Most animals except for the great apes lacked any type of cognitive empathy and all animals lacked reflection. De Waal believed that reflection is what allows humans to realize that war should be avoided and a system of morality should be developed. This is just a new way of articulating Hume's idea of the artificial virtues. Therefore, the same three arguments to Hume also apply to De Waal.

However, De Waal also made an argument about universality. "This is what sets human morality apart: a move toward universal standards combined with an elaborate system of justification, monitoring and punishment (De Waal, 2013, p. 18). His point is that a true system of morality emerges from an intergroup warfare. However, perceptions are quite different. Sripada and Stich (2006) argue that norms are not even universal and that there are different norms within each society and even if a norm is shared by multiple societies, the way that norm manifests itself within a particular society varies considerably (Sripada and Stich, 2006, p. 283). The standards that people hold seem to largely be subjective. The universality argument also means that morality is very new. For the longest, different groups of humans viewed the others as being barbaric. Even as recently as the Cold War the United States and the Soviets viewed each other as subhuman. Does this mean that the people that hold these perspectives were immoral because they did not live up to the same standards? The universality standard simply does not hold up and therefore should be rejected.

Kant also thought morality required a degree of reflection. The moral law requires that a person ask questions about whether their action could be willed to be a universal law. This clearly requires reflection. Christine Koorsgard (2009), a contemporary Kantian who appears in De Waal's book *Primates and Philosopher* certainly makes this argument and even applies

Kantian ethics directly to animals. Koorsgard argues that animals must have normative self-governance or in another words, autonomy in order to have morality. Normative self-governance is the ability to reflect, and control ones actions against mere desires. “The question is not merely about whether the act is an effective way to achieve the end, but whether even given that it is, your wanting this end justifies you in taking this action” (De Waal, 2009, p. 110). If the answer to this question is no, the act should not be performed. Koorsgard and Kant’s problem is that these reflective capacities require a degree of reflection and reason that animals do not possess. Koorsgard even concedes that animals may very well act on the basis of emotions. However, the animal does not have the governance to control themselves against their desires. Additionally, animals do not question themselves about whether they should act in certain ways (De Waal, 2009, p. 111).

There are good reasons for rejecting Kantian arguments and granting some animals moral cognition. First, there is nothing intrinsically motivating about the categorical imperative. Regardless of how much time is spent, the action never occurs until the motivation is present. Motivation is what causes the entity to act morally. The moment a person decides to act one way or another it is because they are motivated to do so. Thus emerges the problem with normative self-governance. The binding force is ultimately that motivation which has control. Regardless what a person decides, when they act, that is what they really wanted to do. That decision was based upon their passion, even if their passion was to follow the moral law.

Even if we adopt Koorsgard’s self-governance it is unclear that there is only one way to meet it. Andrews (2011) argues that apes can demonstrate their control of their actions and internal considerations without even having a mind. Apes demonstrate that they can be their own person and make their own decisions through their imitation. For example, great apes engaging

in observational learning will mimic others. Additionally, apes demonstrate their internal considerations by punishing people who break rules (Andrews 2011, p. 6). Andrew's point is that internal control of action can exist without a theory of mind and still meet Korsgaard's definition, which grants some animals morality.

The next problem with Kantian approaches pertains to deciding when these actions are moral. This is the same problem Hume, Darwin and De Waal face. The reflection process exists, but it is only after the act that this takes place. If people actually did follow Kant's moral law they would have to be postulating categorical imperatives before their actions. Meanwhile, people become hurt and get killed. It seems that most what we call moral is only reflective thought after the moral act. It does not make sense to claim that a person who performs a genuine moral action immoral just because they did not rationalize their thoughts and make sure they were in harmony with the moral law. The act, is judged, not the reflective process that lead to that act.

Rowlands (2012) provides another reason why Kantian arguments lack. The distinction between genuine moral action driven by reflection and non-genuine moral action that is driven by passion does not make sense. Rowlands notes that the reflection leading to control must come from somewhere; it is either an intrinsic, or primitive, element of human life, or some part of scrutiny allows for this control. He rejects the former explanation since there is no adequate explanation of where a primitive reflection originates or how it operates. As he notes, "if there is no explanation of how scrutiny yields control, then the whole schema seems based on an unexplained and unjustified assumption" (Rowlands, 2012, p. 162). Having rejected the first alternative as lacking explanation or justification, Rowlands examines to the second possibility that some properties of scrutiny result in true control. Here Rowlands acknowledges the

differences between people who operate in a world of Kantian reflection and those who do not, and concedes that there must be very different ways in which each of these people experience the phenomenology of decision making. However, the question remains, do those differences in reflection matter at the level of moral cognition? Simple people might do what they think is right simply because they feel the pain of another, while reflective people might feel the pain equally and still engage in high level, potentially abstract reflection, about which course of action they should pursue. However, if the simple, non-reflecting, individuals do what they believe is right, and the more complex, reflective people, engage in much more thought to decide what they believe to be the right course of action, is the distinction worthy of difference since both ultimately choose to do what they believe is right?

Rowlands pursues this line of thinking through two detailed examples. In the first, he argues that animals can be viewed as moral subjects. He uses an example of two people, one who has effective scrutiny over actions and another who does not. Person (1) feels a certain way and acts on the basis of those feelings. This person does not engage Kant's effective scrutiny. Person (2) has those same feelings as person (1) but also asks questions about whether this particular action is right. However, both people end up making the same decision. Person (2) just exercises on a higher cognitive level. There are clearly differences between person (1) and person (2) but, as Rowlands argues, just because they think differently does not mean that those differences equate to the control (Rowlands, 2012, p. 165). The question becomes, if control in choosing between convictions is the deciding factor in morality, where is the evidence that more control is exercised simply because more factors are considered?

Rowlands' second line of argument against the superiority of control from reflection is found in his analogy of super-blindsighted people. Rowlands argues that a super blind sighted

person sees things in ways that most cannot understand. For example, one could throw a ball towards a super blindsighted person who may be able to catch it reliably. Rowlands argues that it is not that these people do not “see,” but that they see in different ways (Rowlands 2012, p. 166). His argument is that this same line of reasoning applies to moral subjects. Person (1) may lack effective scrutiny over their actions, but nevertheless act reliably from the basis of morally laden reasons. Person (1) comes to the same decision as person (2), just with a different moral phenomenology. Rowlands argues the morality of person (1) can be applied equally to some other animals. Rowlands is presenting the argument that since both person (1) and (2) make the same decision to act because they felt the urge to do so, it does not matter what lead to that decision. They just have different phenomenological processes that lead to their decision, like a blindsighted person might reason differently than a traditionally seeing person. But nothing in that process indicates what person (1) did was not moral. It was just different way to perform the same act (Rowlands, 2012, p. 167).

One final problem with Kant is that few people ever rise to the categorical imperative, and those who do cannot expend that energy with frequency. It is highly unlikely that soldiers give considerable thought to whether they will jump on a live grenade to save their comrades before doing so. The reality is that some soldiers have done so when they find themselves in that situation, and the rest of us may reflect on it after the fact. Does the lack of reflection prior to the action make the self-sacrifice any less moral? Does reflection after the fact change the moral standing? If not, then why is it a relevant consideration for animal morality? If you are really a Kantian then you have to think hardly any human behavior is genuine moral. Most human beings do not reflect upon their actions. If we are prepared to accept Kantian reflective capacities as

being a prerequisite to morality then we would have to claim that most people on this planet are immoral.

Conclusion

This paper has argued for the controversial thesis that animals possess moral cognition when they are viewed as moral subjects, not agents. I have traced the history of human thought with respect to this thesis, from an early perspective that readily held animals accountable for their actions, through Descartes, Hume, Kant, Darwin, De Waal, Bekoff and Pierce, and Rowlands. The paper has acknowledged that there are competing standards for morality, including standards that many humans fail to meet. However, contemporary research confirms that animals use tools, make decisions, communicate and play with others, create social norms and punish those who violate them, cooperate for common goals, sometimes act in ways detrimental to themselves for the benefit of others, perceive situations from the perspectives' of others, and empathize and act tactically, according to the situation. Given that animals can be shown to empathize, cooperate, communicate, obey social norms and accept punishments when they do not, it follows that animals possess the ability to make decisions, decisions which involve moral cognition. And yet, this thesis remains controversial because the implications are potentially staggering. One by one, the distinctions between humans and animals have been challenged and rejected, leading to differentiations in degree, not type. Moral cognition is one of the few remaining differences that many people want to deny animals at all.

This work has used Rowlands' arguments for animal moral cognition in animals and added two important elements. The first is the ability to test Rowlands' arguments by exploring specific examples which illustrate the moral cognition he asserts. The second is to add to the discussion with an understanding of the role social norms play in moral motivation and animal

moral systems. These two lines of argument provide significant support for my thesis that animals possess moral cognition.

The implications serve as a major reason why people continue to deny moral cognition to animals. For example, Korsgaard (2009) disagrees with my conclusion about animal moral cognition, but she understands the implications for accepting a thesis like this:

We eat nonhuman animals, wear them, perform painful experiments on them, hold them captive for purposes of our own - sometimes in unhealthy conditions - we make them work, and we kill them at will. Without even taking up the urgent moral questions to which these practices give rise, I think it is fair to say that we are more likely to be comfortable in our treatment of our fellow creatures if we think that being eaten, worn, and killed, cannot mean anything like the same thing to them that it would to us. And that in turn seems more likely to the extent they are unlike us in their emotional and cognitive lives (De Waal, 2009, p. 103-4).

The implications of that thesis may be stark, but they need to be accepted given the evidence.

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